#### III. REMARKS/ARGUMENTS

### A. Status of the Claims

The Office Action dated August 4, 2009, ("Office Action") has been received and carefully considered. Claims 1-6, 8-17 and 19-37 are pending. Applicants respectfully request reconsideration of the rejections of these claims for at least the following reasons.

# B. Claim Rejections Under 35 U.S.C. § 102(e)

Claims 19, 23, 24, 30, 31, and 35 stand rejected under 35 U.S.C. § 102(e) as allegedly anticipated by U.S. Patent No. 6,891,920 to Minyard et al. ("Minyard").

In order for a claim to be anticipated by a reference, that reference must disclose each and every element of the claimed invention. See Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631 (Fed. Cir. 1987) ("A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.")(emphasis added); see also Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236 (Fed. Cir. 1989) ("The identical invention must be shown in as complete detail as is contained in the ... claim.").

Regarding claim 19, the Examiner asserts that Minyard discloses the claimed invention. Applicants respectfully disagree. In particular, Applicants respectfully submit that Minyard fails to disclose "retrieving scan-specific and patient-specific information for the next patient to be scanned; and configuring the scanner for the next patient to be scanned," as recited in claim 19 (emphasis added). In fact, Minyard merely discloses preprocessing (e.g., processing of an image that occurs prior to initial review of that image by a physician) and interim processing (e.g., during a review session, e.g., in a time period between initial review and a subsequent review) of an image. In particular, Minyard discloses preprocessing an

image to facilitate optimization of the displayed image or review workflow, i.e., the sequencing and timing of image display. *See*, e.g., column 3, lines 16-27. Therefore, Minyard merely discloses processing of an image, <u>after scanning a patient</u>, and fails to disclose "retrieving scan-specific and patient-specific information for the <u>next patient to be scanned</u>," as recited in claim 19 (emphasis added).

Also, Applicants respectfully submit that Minyard, at best, merely discloses retrieving scanned images from prior exams from an image repository 106 and fails to disclose, "retrieving scan-specific and patient-specific information for the next patient to be scanned," as recited in claim 19 (emphasis added). Specifically, Minyard discloses that the patients select menu 614 allows the user to select a category of patients to be filtered by the workflow algorithm. Available selections include all today's work, all pending work, all today's unread, all pending unread, user's today's work, and user's pending work. See, e.g., column 13, lines 33-37. Also, Minyard discloses that the viewed select menu 618 allows the user to select images from specific exam histories that are to be included in the workflow. In this regard, it will be appreciated that particular users may wish to review current images against images from prior exams. The study number menu 620 allows the user to specify the exam study histories from which the images are to be obtained. See, e.g., column 13, lines 38-45. In addition, Minyard discloses that user enters the date and time of the first and last scheduled appointment to appears on the work list and selects import. All scheduled appointments that fall within the date/times entered into the start date and end date fields will be imported into the system database from the HIS/RIS system. See, e.g., column 14, lines 46-51. Therefore, Applicants respectfully submit that Minyard, at best, discloses retrieving scanned images from prior exams from an image repository 106 and

fails to disclose, "<u>retrieving</u> scan-specific and patient-specific <u>information for the</u> next patient to be scanned," as recited in claim 19 (emphasis added).

Moreover, Applicants respectfully submit that Minyard fails to disclose "configuring the scanner for the next patient to be scanned," as recited in claim 19 (emphasis added). In particular, Minyard merely discloses user defined protocol that is used for the first image project and the new work flow. The protocol defines the overall configuration and progression of image formats that will be automatically displayed in sequence as the user increments through the review session (emphasis added). See, e.g., column 12, lines 55-59. Also, Minyard discloses a workstation 302 that includes a user interface 304 such as a keyboard and mouse for allowing a user to manage workflow during an image review session. The workstation 302 also includes a display 306 for displaying certain information and managing review session workflow (emphasis added). See, e.g., column 10, lines 30-34. Therefore, Applicants respectfully submit that Minyard, at best, discloses configuring a workstation during a review session, and fails to disclose, "configuring the scanner for the next patient to be scanned," as recited in claim 19 (emphasis added).

Regarding claims 23 and 24, these claims are dependent upon independent claim 19. Thus, since independent claim 19 should be allowable as discussed above, claims 23 and 24 should also be allowable at least by virtue of their dependency on independent claim 19. Moreover, these claims recite additional features which are not disclosed, or even suggested, by the cited references taken either alone or in combination.

Regarding claim 30, while different in overall scope from claim 19, this claim recites subject matter related to claim 19. Thus, the arguments set forth above with respect to claim 19 are equally applicable to claim 30. Accordingly,

Applicants respectfully submit that claim 30 should be allowable over Minyard for the same reasons as set forth above with respect to claim 19.

Regarding claims 31 and 35, these claims are dependent upon independent claim 30. Thus, since independent claim 30 should be allowable as discussed above, claims 31 and 35 should also be allowable at least by virtue of their dependency on independent claim 30. Moreover, these claims recite additional features which are not disclosed, or even suggested, by the cited references taken either alone or in combination.

In view of the foregoing, Applicants respectfully request that the aforementioned anticipation rejection of claims 19, 23, 24, 30, 31, and 35 be withdrawn.

# C. Claim Rejections under 35 U.S.C. § 103(a)

#### 1. Claims 1-3, 8-14, and 36-37

Claims 1-3, 8-14, and 36-37 stand rejected as allegedly rendered obvious by U.S. Patent Application Pub. No. 2002/0099571 A1 to Waku et al. ("Waku") in view of U.S. Patent No. 5,623,927 to Damadian et al. ("Damadian"). Applicants respectfully submit that claim 1, requires (1) that the data entry step relating to a second scan is started after the data acquisition step for the first scan is started and is completed before the data acquisition for the first scan is completed, and (2) that scan protocol data relating to the second scan is entered into a scan processing unit during the data entry step.

Applicants submit that the Office Action unfairly interpreted the disclosure of Waku. Waku discloses "a system to be connected via a network to a plurality of medical systems installed in a medical institution, configured to manage various works performed at the medical systems." Waku, ¶ 0013. Waku further discloses

that "[v]arious systems for the management of the medical work as an object by the stream are considered. Examples include a system for executing medical works relating to a plurality of patients in parallel, in a single apparatus." Waku, ¶ 0036. Based on this disclosure alone, the Office Action contends that Waku discloses that the patient identification step for a second patient may take place in parallel with the scan of a prior patient." Office Action, page 3. This is an improper reading of Waku, as later in the disclosure, Waku discloses that "a plurality of examinations are sometimes performed in parallel." Waku, ¶ 191,¹ but only discloses that scan processing and film processing are performed in parallel. Waku, ¶ 0192. Scan processing and film processing occurring in parallel is not the same as data acquisition for a first scan and data input for a second scan occurring in parallel.

In one example, Waku discloses a CT scan examination procedure in which some information relating to a patient's scan may be entered <u>prior</u> to the patient arriving at the scanning equipment. Specifically, Example 1 discloses that, once a patient arrives at a hospital, a stream for the patient is issued. Waku, ¶ 0134. Although not specifically disclosed, based on the rest of Waku's disclosure, the initial processing would involved inputting basic patient information into the hospital information system ("HIS"). In this example, following an examination, if a doctor prescribes an order for a CT examination, the order is sent to the radiology information system ("RIS"). Waku, ¶ 0137. The doctor requesting the scan can select content from a template, and can also enter a "simple instruction, such as 'a

<sup>&</sup>lt;sup>1</sup> This example appears to be the embodiment referred to in paragraph 36 ("Examples include a system for executing medical works relating to a plurality of patients in parallel, in a single apparatus .... The application to various systems will be described later in respective embodiments.") and cited by the Office Action to support its interpretation that "the patient identification step for a second patient may take place in parallel with the scan of a prior patient." Office Action, Page 2.

standard head scan, scan template in the CT apparatus, MPR or 3D preparation template, template of a fine process such as filming and archiving, and parameters used in the template." Waku,  $\P$  138. This information is <u>not</u> disclosed as being entered into the scan processing unit, however. Instead, this information entered into the stream for the hospital. Waku,  $\P$  0136. Waku then discloses that the examinations then "proceed according to the list" of patients on the examination schedule. Waku,  $\P$  140.

At this point, Waku discloses that the radiation section then checks content and enters additional information. Waku, ¶ 141. After the scan is completed,

in accordance with the patient, site, and case, image check is performed. Also in this case, since a check method is preset in accordance with the scan content and operator, the method is used as it is, or changed, and the image is checked. Re-scan or reconstruction retry is performed based on the result. When the check operation ends, the operation is shifted to the next process by the "Next" button. As described above, in the stream, from issuance of the stream to the end, the flow of the stream can proceed in the order of processes in the stream.

Waku, ¶ 0145. Thus, Waku essentially describes a streamlined process for requesting an examination and entering patient information, but does not disclose "during the data acquisition step for the first scan, completing a data entry step relating to a second scan, the data entry step including entering scan configuration data related to the second scan into a scan processing unit." Therefore, Applicants respectfully request that the rejection of these claims be withdrawn.

In addition, throughout its disclosure, the only data that Waku discloses as being entered before scanning is the entry of "basic information of a health insurance card and the like." Waku, ¶ 0172. This "basic information" is simply patient identification information, not "scan protocol data related to the second

scan." Further, this information is not entered into a scan processing unit for the scanner, but rather into the Hospital Information System ("HIS") database. Waku, ¶ 0171. Therefore, Waku does not disclose this element.

Also, Damadian fails to remedy the deficiencies of Waku. Applicants submit that Damadian discloses subjecting one patient to the scan protocol time component of a magnetic resonance imaging procedure after positioning the patient in the imaging volume, and simultaneously preparing the second patient, for the scan protocol time component of a second magnetic resonance imaging procedures (emphasis added). This overlapping of scan protocol and patient handling functions using two patient handling systems results in a significant enhancement of scanner utilization (emphasis added). See, e.g., column 4, lines 47-55. Thus, Applicants respectfully submit that Damadian, at best, discloses simultaneously preparing the first and second patient for scanning, and fails to disclose (1) that the data entry step relating to a second scan is started after the data acquisition step for the first scan is started and is completed before the data acquisition for the first scan is completed, and (2) that scan protocol data relating to the second scan is entered into a scan processing unit during the data entry step, as required by claim 1.

Regarding claims 2-6 and 36, these claims are dependent upon independent claim 1. If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. In re Fine, 837 F.2d 1071 (Fed. Cir. 1988). Thus, since independent claim 1 should be allowable as discussed above, claims 2-6 and 36 should also be allowable at least by virtue of their dependency on independent claim 1. Moreover, these claims recite additional features which are not disclosed, or even suggested, by the cited references taken either alone or in combination.

Regarding claim 8, while different in overall scope from claim 1, this claim recites subject matter related to claim 1. Thus, the arguments set forth above with respect to claim 1 are equally applicable to claim 8. Accordingly, Applicants respectfully submit that claim 8 should be allowable over Waku and Damadian for the same reasons as set forth above with respect to claim 1.

Regarding claims 9-14, 16, 17, and 37, these claims are dependent upon independent claim 8. If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. <u>In re Fine</u>, 837 F.2d 1071 (Fed. Cir. 1988). Thus, since independent claim 8 should be allowable as discussed above, claims 9-14, 16, 17, and 37 should also be allowable at least by virtue of their dependency on independent claim 8. Moreover, these claims recite additional features which are not disclosed, or even suggested, by the cited references taken either alone or in combination.

In view of the foregoing, Applicants respectfully request that the aforementioned obviousness rejection of claims 1-6, 8-14, 16, 17, 36, and 37 be withdrawn.

# 2. Claims 20-22, 25-29, and 32-34

Claims 20-22, 25-29, and 32-34 stand rejected as allegedly rendered obvious by Minyard, as applied to claim 19, in view of Waku and further in view of Damadian. As noted above, independent claims 19 and 30 are allowable and not anticipated; therefore, all claims dependent thereon, are also allowable and non-obvious. Therefore, Applicants respectfully request that the outstanding rejection be withdrawn.

#### IV. CONCLUSION

Applicants respectfully submit that the application is in condition for allowance. Applicants believe that no fees are necessary in connection with the filing of this document. In the event any fees are necessary, please charge such fees, including fees for any extensions of time, to the undersigned's Deposit Account No. 50-0206. Should any outstanding issues remain, the Examiner is invited to telephone the undersigned at the number listed below.

Respectfully submitted, HUNTON & WILLIAMS LLP

Dalei Dong

Registration No. 60,363

Dated: November 3, 2009

Hunton & Williams LLP 1900 K Street, N.W., Suite 1200 Washington, D.C. 20006-1109 (202) 955-1500 (telephone) (202) 778-2201 (facsimile)